Appln. No.: 10/644,038

Amendment Dated October 21, 2005 Reply to Office Action of August 19, 2005

Remarks/Arguments:

Claims 1-21 are pending.

Claims 1-5, 7-14 and 17-21 stand rejected. Claims 6, 15 and 16 are objected-to.

Drawings:

The Examiner has objected-to the drawings, because they do not show a second reference signal. Applicants respectfully submit that the drawings are correct, but claim 10 needs correction.

As shown in FIG. 1, a single reference source is indicated. Applicants have now corrected claim 10 so that it only includes one reference source.

Section 112 Rejections:

Claim 10 has now been corrected, so that it recites a single reference signal.

Section 102/103 Rejections:

Claims 1-5 have been rejected as being obvious in view of Jopson and Chou. Claims 7, 8-9, 11-14 and 17-21 have been rejected as being anticipated by Jopson. Applicants respectfully submit that these rejections are overcome for the reasons set forth below.

Claim 1 includes features which are not suggested by the cited references, namely:

- a system for remotely imaging a sample, using optical radiation reflected/scattered from the sample,
- a focal planar array (FPA) configured to detect the first and second optical radiation after interaction with the sample and generate a single detection signal;...
- the FPA detects the first and second optical radiation free-of image mis-registration.

Basis for a system remotely imaging a sample may be found in the specification, for example, at page 8, paragraphs 27 and 28.

Basis for a focal planar array (FPA) configured to detect optical radiation and generate a single detection signal may be found, for example, at page 11, paragraph 36. As described, the output signals from multiple sources is modulated and recovered as images that are obtained from the same detector array 135 (shown in FIG. 1). The detector array recovers these different signals to produce a single detection signal.

Basis for the FPA detecting first and second optical radiation free-of image misregistration may be found, for example, at pages 11-12, paragraph 36. As described, the four colors are obtained from the same portions of detector 135. Therefore, any image misregistration is avoided by system 100.

ITDE-PACD110US

Appln. No.: 10/644,038

Amendment Dated October 21, 2005 Reply to Office Action of August 19, 2005

As described in paragraph 4 of the specification, for example, an advantage of the present invention results from active polarization imaging, which avoids mis-registration among images having different polarizations.

Jopson, on the other hand, discloses a system for simultaneously taking measurements for determining polarization mode dispersion (PMD). At FIG. 7, Jopson discloses multiple optical radiation sources, each having a different modulation frequency. These multiple modulated sources are then polarized by polarization device 400. A polarimeter 600 is used to measure the polarization of the input signals. Jopson, however, does **not** suggest a system for **remotely imaging a sample, using optical radiation reflected/scattered from the sample**. Furthermore, Jopson does **not** disclose a **focal planar array (FPA)** configured to **detect optical radiation after the optical radiation interacts with the sample**. Moreover, Jopson does **not** suggest an FPA that detects the first and second optical radiation **free-of image mis-registration**. It is respectfully submitted that Jopson is a disclosure for a completely different subject matter (PMD measurements) than that recited in the preamble of amended claim 1.

Chou discloses a polarimeter for investigating optical activity of a device under test. Chou uses two frequency laser sources to generate a laser beam with two eigen modes of two different polarized waves. This laser beam is passed through the device under test. Different photodetectors then receive each of the split beam and generate a corresponding interference signal. Chou does **not**, however, supply any of the features of amended claim 1 that are missing from the disclosure of Jopson.

In other words, Chou does **not** suggest a system for **remotely imaging a sample using optical radiation reflected/scattered from the sample**. Furthermore, Chou does **not** suggest a **FPA** which is configured to **detect multiple optical radiation after interaction with the sample and generate a single detected signal**. Further still, Chou does **not** disclose an FPA that detects multiple optical radiation that is **free-of image mis-registration**. It is respectfully submitted that Chou is completely different from the invention as recited in claim 1.

Favorable reconsideration is requested for amended claim 1. Dependent <u>claims 2-6</u> further limit claim 1. Therefore, these dependent claims are not subject to rejection in view of the cited references for at least the same reasons set forth for amended claim 1. Favorable reconsideration is respectfully requested.

Although not the same, claim 7, 12, 17 and 21 have been amended to include features that are similar to amended claim 1. Favorable reconsideration is requested for these claims.

Dependent claims 8-11 depend from claim 7, dependent claims 13-16 depend from claim 12, and dependent claims 18-20 depend from claim 17. These dependent claims are, therefore, not subject to rejection in view of the cited references for at least the same reasons set forth for amended claim 1. Favorable reconsideration is respectfully requested.

Claim 14:

At page 9, of the Office Action, claim 14 is rejected because Jopson discloses a single detector including a focal planar array, and because the detection signals include a plurality of images at different polarizations (FIG. 7, reference 600). Applicants respectfully submit that

ITDE-PACD110US

Appln. No.: 10/644,038

Amendment Dated October 21, 2005 Reply to Office Action of August 19, 2005

reference 600 is a polarimeter and, to the best of applicants knowledge, there is no disclosure in the Jopson reference that discusses a focal planar array. Reconsideration is respectfully requested separately for claim 14.

Allowable Subject Matter:

Claims 6, 15 and 16 have been objected-to, but would be allowable, if rewritten in independent form. Applicants for now wish to rely on the amendments of claims 1 and 12 for the patentability of claims 6, 15 and 16.

Conclusion

Claims 1-21 are in condition for allowance.

Respectfully submitted,

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